

APPENDIX 2:

Study	F/S Focus? <sup>1</sup>	Design	Sample size		Sample	M/R focus? <sup>2</sup>	Religiosity Measures	Independent Variables	Dependent Variables	Key Words	Emotion <sup>3</sup>	Atten-/Aware. <sup>4</sup>	Conscious. <sup>5</sup>	Self-ref <sup>6</sup>	Body A,S,C <sup>7</sup>	Mental WB <sup>8</sup>	Comp & Emp <sup>9</sup>	Other	MRI	fMRI	PET	EEG	BOLD Signal	CBF	DTI	Other Methods	DMN <sup>10</sup>	ACC	Hypothalamus	Hippocampus	GM/Cort <sup>11</sup>	PFC	Lobe	Hemisphere	Other Brain Regions	Alpha Waves	Beta Waves	Delta Waves	Gamma Waves	Theta Waves	EEG Measure used	EEG analyses method	EEG Reference	
Beauregard et al. 2008	F	CS	14		Fourteen Carmelite nuns (average years of affiliation with the Carmelite order is 18.93)	R	Mysticism Scale	Religious condition (Mystical condition vs. Control condition vs. Baseline condition)	EEG spectral power and coherence	Mystical experience, perceptual changes, cognitive changes, hemispheric integration, EEG power and coherence	0	0	0	0	0	0	0	Hemispheric integration	0	0	0	1	0	0	0	0	0	0	0	0	0	0	F, P, T	B	n/a	1	0	0	1	1	Power, coherence	Spectral analyses	Lin et al.	
Inzlicht et al. 2009	F	CS	50		Fifty college students of diverse religious backgrounds	R	Religious Zeal scale (McGregor et al, 2008) and single item measure of belief in God	Religious Zeal and Belief in God	Brain activity via EEG during performing Stroop Task	Stroop task, religious conviction, anxiety, self-regulation, religious zeal, belief in God	1(anxiety)	0	0	0	0	0	0	Religious conviction	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	n/a	B	n/a	0	0	0	0	0	ERN and ERP activity and amplitude	ERP analyses :ERN	Avie et al.
Fondeville et al. 2012	F	CS	30		Thirty Catholic Spanish, 21 Women	R	Kapogiannis Questionnaire, Likert Scale	Religiosity	N400 component of ERP waveforms	MCI hypothesis, minimally counterintuitive ideas, religious sentences, cognitive model of religion	0	1 (verbal)	0	0	0	0	0	minimally counterintuitive	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0	0	0	N400 component of ERP	ERP analyses :N400	Lin et al.
Tenke et al. 2013	F	L	52		Subjects at low and high risk for depression	R	Self-reports of importance of religion or spirituality	Personal importance of religion or spirituality/ assessment time-point	EEG alpha	Spirituality and religion, personal importance of R/S, EEG alpha, affective processes	0	0	0	0	0	1(depression)	0	n/a	0	0	0	1	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a	1	0	0	0	0	factor (alpha factor)	Spectral analyses	su et al.	
Tenke et al. 2017	F	L	73		subjects at low and high risk for depression	R	Self-reports of importance of religion or spirituality	personal importance of religion or spirituality/ assessment time-point	EEG alpha	spirituality and religion, personal importance of R/S, EEG alpha, affective processes	0	0	0	0	0	1(depression)	0	n/a	0	0	0	1	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a	1	0	0	0	0	factor (alpha factor)	Spectral analyses	su et al.	
Thiruchselvam et al. 2017	n/a	CS	49		college students (religious/nonreligious)	R	self-reported attractiveness scale (faces); Hamilton	amplitude	EEG alpha	religious and non religious, EEG alpha, attractiveness,	1	1	0	0	0	0	0	n/a	0	0	0	1	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a	1	1	1	1	1	Late positive potential	LPP amplitudes	Lin et al.	
Kober et al. 2017	FS	CS	40		40 healthy adults, 18 males 22 females,	R	Centrality of Religiosity Scale, Freiburg Mindfulness inventory (FMI-14)	self-reported frequency of prayer	gray matter volumes, neurofeedback performance	brain volumetry, cognitive control, mental strategy, neurofeedback, prayer, spiritual practice	0	1	0	1	1	0	0	n/a	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	n/a	n/a	Broadman area 10 (left medial orbitofrontal cortex)	0	1	0	0	1	NF	Spectral analyses	no et al.
Beauregard et al. 2006	F	CS	15		15 Carmelite nuns	R	None	Religious condition (Mystical condition vs. Control condition vs. Baseline condition)	fMRI activity	Carmelite nuns; Mystical state; Functional magnetic resonance imaging; Temporal lobes; Prefrontal cortex; Parietal cortex; Spiritual neuroscience	0	0	0	0	0	0	0	n/a	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	n/a	L	insula	0	0	0	0	0	n/a	n/a	n/a
Han et al. 2006	F	CS	28		Fourteen non-religious and fourteen Christian Chinese participants	R	Six religious items derived from Minnesota Multiphasic Personality Inventory and 50-question religious knowledge questionnaire	Religious faith (Christian vs non-religious)	fMRI activity	self-referential processing, self-denial	0	0	0	1	0	0	0	n/a	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	F	B	Ventral and dorsal medial prefrontal cortex	0	0	0	0	0	n/a	n/a	n/a
Schjoedt et al. 2008	F	CS	20		Twenty healthy young adult Christian volunteers (6 males, 14 females).	R	A self-report survey to determine belief in whether God exists and confidence in God's reciprocity.	High/low structure religious & non-religious recitals (Lords Prayer vs rhyme, personal prayer vs wishing to Santa). Also introduced a linguistic, non-semantic baseline	fMRI activity	(silent religious) prayer, caudate nucleus, Christians, habit formation, dopamine, reward system, striatum	0	0	0	0	0	0	0	1 (trust, authority)	n/a	0	1	0	0	0	0	0	0	0	0	0	0	0	0	n/a	R	Dorsal striatum, caudate nucleus	0	0	0	0	0	n/a	n/a	n/a

[illegible]

